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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,367	02/07/2001	Bruce Kreikemeier		6849

31083 7590 11/28/2003

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OMAHA, NE 68124

EXAMINER

BARNES, CRYSTAL J

ART UNIT	PAPER NUMBER
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2121

DATE MAILED: 11/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/778,367

Applicant(s)

KREIKEMEIER ET AL.

Examiner

Crystal J. Barnes

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Reconsideration (paper no. 7) pages 2-4, filed 17 November 2003, with respect to claims 1-4 rejected under 35 USC 102(a) as being anticipated by USPN 6,600,971 B1 to Smith et al. have been considered but are moot in view of the new ground(s) of rejection.
2. Applicant's arguments, see Reconsideration (paper no. 7) pages 5-6, filed 17 November 2003, with respect to claims 1-4 rejected under 35 USC 102(b) as being anticipated by USPN 4,626,984 to Unruh et al. have been fully considered and are persuasive. The rejection of claims 1-4 under 35 USC 102(b) has been withdrawn.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,600,971 B1 to Smith et al. in view of USPN 6,173,727 B1 to Davey.

As per claim 1, the Smith et al. reference discloses in combination with mechanized irrigation components and ancillary equipment therefore for irrigating a field comprising a wireless RUI (see figure 3 and column 6 lines 20-24, "remote device 25") comprising a handheld display and keypad for (a) reading the status (see column 6 lines 1-3, "monitor") of irrigation components (see column 5 lines 47-51, "sprinkler valves 17") and ancillary equipment (see column 5 lines 52-56, "various sensors 21") and (b) controlling (see column 6 lines 1-3, "operate") the irrigation components "sprinkler valves 17" and ancillary equipment "various sensors 21". Also see column 7 claim 3.

The Smith et al. reference does not expressly disclose a wireless RUI comprising a handheld display and keypad.

The Davey reference discloses

(see column 5 lines 37-40, "The remote communication means 124 ... remote control of actuation of the various sprinkler stations.")

(see column 6 lines 19-25, "By using the remote control means 124, the user is able to actuate the valve ...")

(see column 7 lines 11-15, "The user presses a touch key ...")

(see column 9 lines 12-18, "The remote control means 124b ... touch pad 234 ... touch keys 238.")

(see column 9 lines 44-47, "... a display screen 250 ...")

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the hand held unit taught by the Smith et al. reference with the remote control means taught by the Davey reference to illustrate the display and keypad.

One of ordinary skill in the art would have been motivated to illustrate the display and keypad necessary to assume control from the central computer to maintain the capability of monitoring and operating the entire system.

As per claim 2, the Smith et al. reference discloses said wireless RUI (see figure 3 and column 6 lines 20-24, "remote device 25") has the capability of reading the status (see column 6 lines 1-3, "monitor") of the irrigation components (see column 5 lines 47-51, "sprinkler valves 17") and ancillary equipment (see column 5 lines 52-56, "various sensors 21") and controlling (see column 6 lines 1-3, "operate") the same from any location (see column 5 lines 4-16 "node") in the field "network".

As per claim 3, the rejection of claim 1 is incorporated and further claim 3 contains limitations recited in claim 1; therefore claim 3 is rejected under the same rationale as claim 1.

As per claim 4, the rejection of claim 1 is incorporated and further claim 4 contains limitations recited in claim 1; therefore claim 4 is rejected under the same rationale as claim 1.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to remote monitoring and control of irrigation systems in general:

USPN 4,244,022 to Kendall

USPN 6,337,971 B1 to Abts

USPN 6,633,786 B1 to Majors et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Crystal J. Barnes whose telephone number is

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703.306.5448. The examiner can normally be reached on Monday-Friday alternate Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anil Khatri can be reached on 703.305.0282. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.305.3900.

cjb
November 24, 2003



ANIL KHATRI
SUPERVISORY PATENT EXAMINER